

**This Page Is Inserted by IFW Operations  
and is not a part of the Official Record**

## **BEST AVAILABLE IMAGES**

**Defective images within this document are accurate representations of the original documents submitted by the applicant.**

**Defects in the images may include (but are not limited to):**

- **BLACK BORDERS**
- **TEXT CUT OFF AT TOP, BOTTOM OR SIDES**
- **FADED TEXT**
- **ILLEGIBLE TEXT**
- **SKEWED/SLANTED IMAGES**
- **COLORED PHOTOS**
- **BLACK OR VERY BLACK AND WHITE DARK PHOTOS**
- **GRAY SCALE DOCUMENTS**

**IMAGES ARE BEST AVAILABLE COPY.**

**As rescanning documents *will not* correct images,  
please do not report the images to the  
Image Problem Mailbox.**



Europäisches Patentamt  
European Patent Office  
Office européen des brevets



(11) **EP 0 967 128 A3**

(12) **EUROPEAN PATENT APPLICATION**

(88) Date of publication A3:  
16.10.2002 Bulletin 2002/42

(51) Int Cl.7: **B60R 21/34**

(43) Date of publication A2:  
29.12.1999 Bulletin 1999/52

(21) Application number: **99112056.9**

(22) Date of filing: **22.06.1999**

(84) Designated Contracting States:  
**AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU  
MC NL PT SE**  
Designated Extension States:  
**AL LT LV MK RO SI**

(72) Inventors:  
• **Matsuura, Yasuki**  
Yokohama-shi, Kanagawa 244-0816 (JP)  
• **Maki, Tetsuo**  
Yokosuka-shi, Kanagawa 238-0034 (JP)

(30) Priority: **26.06.1998 JP 18095898**  
**09.06.1999 JP 16314099**

(74) Representative: **Grünecker, Kinkeldey,  
Stockmair & Schwanhäusser Anwaltssozietät  
Maximilianstrasse 58  
80538 München (DE)**

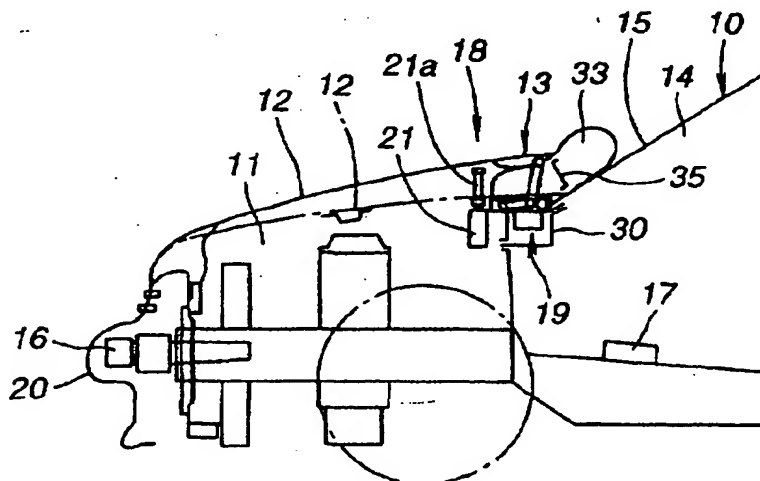
(71) Applicant: **Nissan Motor Co., Ltd.**  
Yokohama-shi, Kanagawa 221-0023 (JP)

(54) **Device for reducing the impact to a pedestrian during a collision with a motor vehicle**

(57) A device for reducing impact to a pedestrian involved in a collision with a motor vehicle includes a displacement mechanism (18) to raise a hood (12) from a rest position to an impact position elevated relative to the rest position, and an air bag module (19) including an air bag (33). The air bag module is operative to inflate

the air bag after displacement of the hood from the rest position to the impact position has begun. When inflated, the air bag has its first cushion portion extending beneath the hood and its second portion extending out from the rear of the hood. The second cushion portion extends a lower portion of a windshield (15) of the vehicle.

**FIG.1A**



**EP 0 967 128 A3**



European Patent  
Office

# EUROPEAN SEARCH REPORT

Application Number  
EP 99 11 2056

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.6)
D, A	US 4 249 632 A (KRAMER MARTIN ET AL) 10 February 1981 (1981-02-10) * the whole document *	1, 23, 24	B60R21/34
A	DE 27 11 338 A (APPEL HERMANN PROF DR ING) 28 September 1978 (1978-09-28) * page 9, paragraphs 2,3; figures 6,7 *	1, 23, 24	
A	PATENT ABSTRACTS OF JAPAN vol. 1998, no. 04, 31 March 1998 (1998-03-31) & JP 09 315266 A (MITSUBISHI MOTORS CORP), 9 December 1997 (1997-12-09) * abstract *	1, 23, 24	
			TECHNICAL FIELDS SEARCHED (Int.Cl.6)
			B60R B62D
The present search report has been drawn up for all claims			
Place of search <b>MUNICH</b>		Date of completion of the search <b>20 August 2002</b>	Examiner <b>Plenk, R</b>
<p>CATEGORY OF CITED DOCUMENTS</p> <p>X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document</p> <p>T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons &amp; : member of the same patent family, corresponding document</p>			

EPO FORM 1003 03 02 (P04C01)

ANNEX TO THE EUROPEAN SEARCH REPORT  
ON EUROPEAN PATENT APPLICATION NO.

EP 99 11 2056

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on  
The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

20-08-2002

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 4249632	A	10-02-1981	DE 2814107 A1	04-10-1979
DE 2711338	A	28-09-1978	DE 2711338 A1	28-09-1978
JP 09315266	A	09-12-1997	NONE	

EPO FORM P0456

For more details about this annex : see Official Journal of the European Patent Office, No. 12/82